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*Two Letters from the late Charles Waterton, Esq.,
of Walton Hall.*

[THESE letters, although never intended for publication, contain so much that is really interesting to the naturalist, that I do not think it right to withhold them, more especially as everything connected with the illustrious deceased, if it tend to throw light on his favourite pursuit, has become, as it were, public property since the death of the great naturalist.—*Edward Newman.*]

Walton Hall, November 6th, 1845.

My dear Sir,

I cannot leave England without dropping you a line to wish you all manner of success, and to say how sorry I feel that such a paper as "The Two Foxes" should have found its way into the respectable pages of the useful 'Zoologist' [Zool. 1160]. The fox must have seized the goose by the leg; the goose then would have attempted a flight, and must have dragged the fox to the surface, if not out of the water altogether.

No goose would dive in such a predicament. On the contrary, flight *must* have been its motion. Fancy, then, the long and strong wings of the goose expanded, and its bulky body pressing upwards. In the meantime, Reynard, underneath the surface, and not able to breathe, is to succeed in pulling down this firmly resisting body below it. Foxes never take the water except through the pressure of hounds or of hunger. It was hunger in this case. Still the thief did not eat the food procured at such a risk, and in a manner so repugnant to his usual habits, but must e'en try his luck again, all dripping wet; and he actually entered the water a second time for a second goose. His supernatural reasoning powers are then introduced by way of finale to the farce. I could write a long paper on this gross Yankee fabrication, which may possibly be of use some time or other, should Drs.* Macgillivray and Audubon lay their heads together to concoct a second edition of the "Biography of Birds."

I write this to you as a friend. You may show it to whom

* See my 'Autobiography' second part.



you please. I leave England for Madeira to-morrow week. In the meantime, I remain, my dear Sir,

Very truly yours,

CHARLES WATERTON.

Edward Newman, Esq.

Private.

Walton Hall, January 27th, 1846.

My dear Sir,

Although it is not my intention to defend the poor hedgehog in the pages of the 'Zoologist,' still, as my name has been introduced into your number of January [Zool. 1204], I have ventured to send you a few remarks on Mr. Wolley's paper.*

1st. There appears an incorrectness in his statement, for his birds were "chickens," and then one of them became "a full-grown fowl" in the same night.

2ndly. As the hedgehog had the run of a small walled garden, might he not have supposed that the hole in the hencoop was a hole in his prison-wall? If so, he would enter it for flight, and not for food.

3rdly. His not supping on "beetles and other insects" and "milk," which the walled garden was known to contain, argues strongly that his capture and imprisonment had destroyed his appetite for the time. Hence I would conjecture that he squeezed himself into the coop for bolting, and not for belly.

4thly. Disappointed in not finding an outlet in the posterior of the hencoop, I can easily conceive that he made a sufficient stir to cause the fowls to leave their perch, and that, in their fright, at the sight of a suspicious intruder, they would set up a cackling loud enough to rouse Mr. Wolley from the arms of Morpheus.

But as Mr. Wolley was not present when the uproar commenced, I am at a loss to discover how he knew that the hedgehog had first attacked the fowls. Might not the fowls have attacked the hedgehog? I once saw a hen attack and kill a magpie.

5thly. "Thrice and once the hedgehog whined." This whining goes far to convince me that the hedgehog was fighting, and not feeding; for I know, and can prove by many observations, that the hedgehog takes its prey in *silence*.

* The paper which Mr. Waterton refers was, I think, from the pen of the Rev. J. Pemberton Bartlett, not Mr. Wolley.—*E. N.*

6thly. Mr. Woolley's observation, that the hedgehog *would* have drunk the life blood of the fowls, had not his timely arrival prevented the tragedy, is mere surmise, without apparent foundation, for if the hedgehog had refused the milk, it is but just to suppose that he would have no immediate appetite for blood. Indeed his capture and captivity, I should think, were quite sufficient to engross all his thoughts for the first night. Thus you see that I am not a convert to Mr. Woolley's doctrine. My park is well stocked with hedgehogs, and my hen-house has an aperture on a level with it, for the ingress and egress of the fowls; still not one solitary hedgehog has ever been seen in the hen-house, or a single fowl or chicken ever known to have been killed by this quadruped.

By the way, I have a family of milk-white hedgehogs in the park.

I see, by your December number, that our wise ones in Ornithology have raised the Canada goose to the dignity of a swan.

It appeared a swan to Cuvier, "*Me parait aussi un vrai cygne.*" According to Peter Pindar, Sir Joseph Banks once thought that a flea might be a lobster. Cuvier was a great philosopher and an honest gentleman; and he knew a good deal about the *form* of some birds: but, for the *habits* of birds in general he knew as much about them as I did about his own grandmother.

I cannot hail the Canada goose as a swan for the following reasons:—

1st. The swan does not obtain his full adult plumage until the third year; whereas the Canada goose is in mature plumage, like all other geese, by the end of the first year. 2ndly. The swan does not breed till the third year; but the Canada goose rears its young ones in the second year. 3rdly. The Canada goose will breed with other geese, even with the diminutive Barnacle goose; still the swan is never known to make love to any goose. 4thly. The swan takes a mouthful of food, and immediately immerses his beak in the water, when the food undergoes a kind of filtering process; still the Canada goose never does this. 5thly. The swan does not feed upon the grass in the pasture; but the Canada goose lives *entirely* on it. 6thly. The Canada goose does not pursue, and even kill, its progeny of the former year, at the next breeding-season; whereas the swan invariably does this. 7thly. The swan is what may be styled a mute

bird; but the Canada goose is most vociferous, on wing and on foot, and when disturbed.

N.B. When I say *entirely*, I mean the year throughout, except in harvest time, when the Canada goose will frequent the corn-fields.

I have always forty or fifty Canada geese here; and I have such uncommon opportunities of looking into their economy, that I fancy I could write a very long chapter on their nature and habits. They are just now flying round the house night and day, making an incessant trumpet noise, preparatory to breeding.

As postage costs nothing now, and as the reading of this letter will only take up about two minutes of your precious time, I feel no scruple in troubling you with these remarks. I arrived from Madeira about a fortnight ago. I had taken my sister to pass the winter there. I should have returned this week, but Her Majesty has detained me to prosecute thieves and poachers at the Lent Assizes. Six of the villains are lodged in York Castle.

Believe me, my dear Sir, very truly yours,
Edward Newman, Esq.

CHARLES WATERTON.

Notes on the Zoology of Spitsbergen.

By ALFRED NEWTON, M.A., F.L.S., F.Z.S.*

IN the month of May last, Mr. Edward Birkbeck offered me a berth in his yacht, the "Sultana," R. T. Y. C., on a voyage to Spitsbergen. As this was a country I had long been desirous to visit, I was very glad of the opportunity of seeing it, which had so unexpectedly presented itself. On the 31st of May I found myself on board the vessel at Lowestoft, and the following morning we sailed northward. After a passage protracted by some tedious calms, we cast anchor in the Bay of Hammerfest on the evening of the 26th June. Here it was necessary to stay for some days, while a Norwegian "jægt" was being equipped to accompany us, and to take us, if necessary, into the ice, where the yacht, from her extreme length, would become embarrassed, and from her slight build dangerous. Late in the evening of the 2nd July the necessary preparations were completed, and the

* Reprinted from the 'Proceedings of the Zoological Society of London,' November 8, 1864, and kindly communicated by the author.

"Semmline," a sloop of some thirty or forty tons, got under way. The next morning the "Sultana" followed, and, overhauling her consort in the narrow seas, in the course of the afternoon lost sight both of her and the land of Norway. On the afternoon of the 6th July we made the South Cape of Spitsbergen, bearing N.E.

Our first rendezvous having been appointed about halfway up the deep bay marked on English charts as Wibelan's Water, and known to Norsk walrus-hunters as Stor Fjord, which indents the archipelago of islands forming Spitsbergen, our course was altered accordingly; but we were soon brought up, after passing a good deal of drift ice, by the appearance of very closely packed ice, stretching across as far as the state of the atmosphere would allow us to see it. This to our pilot, a man whose knowledge of Spitsbergen is scarcely surpassed by any one, was a manifest indication of the fjord being completely blocked up, and he did not hesitate to order us to proceed to our second rendezvous in Ice Sound, on the west coast. Thither we made sail, trying as we passed northward successively to enter Horn and Bell Sounds, both of which we found to be impracticable from the same cause as had been the Stor Fjord. On nearing Ice Sound, on the afternoon of the 8th July, we found a good deal of ice drifting out of its mouth; but it was of such a kind as to cause no risk to the ship, with our careful captain and pilot. While we were watching with interest the novel scene presented to us by the varied shapes of the frozen masses through which we were navigating, there was a cry of "White whales!" and a "school" of *Beluga catodon* passed across our bows. Though there were the vivid hues of drifting ice-blocks with which to contrast them, I was agreeably pleased to see that their colour stood this high trial. When, some years ago, I saw the so-called "white porpoises" of the river St. Lawrence, identified by Dr. Gray (Cat. Brit. Mus. Cetacea, pp. 78, 79) with this species, they had a very tallowy appearance; now the worst that could be said of these beasts is that they looked the colour and consistency of a good spermaceti candle. There were at least six or eight of them swimming at very short distances from one another, and they glided rapidly through the water with an easy and almost graceful roll, now and then emerging from the surface sufficiently to show the whole of their bodies.

It is not my intention now to say much concerning the birds of Spitsbergen; but I must mention that the sound we were entering presents one of the most beautiful sights to the eye of the ornithologist

that can possibly be conceived. The species which frequent Spitsbergen are few in number, much fewer than had been thought prior to the publication of Herr A. J. Malmgren's admirably critical papers;* but the number of individuals is past all computation. It will be sufficient here to name the species I observed at this time, and this I shall do somewhat in the order of their comparative abundance. First *Mergulus alle*, *Uria arra*, and *Cepphus grylle*;† then *Rissa tridactyla*, *Somateria mollissima*, *Procellaria glacialis*, *Fratercula glacialis*, *Larus glaucus*, and, lastly, an *Anser* which I shall specify hereafter. All these, excepting *Larus glaucus*, we found breeding around Ice Sound; indeed, I may say, in the immediate neighbourhood of Safe Haven, a commodious inlet on its northern shore, where the yacht dropped her anchor on the morning of the 9th July.

The whole of the next week was employed by our party in exploring, with different objects in view, the shores of the sound, or, as it should be more properly called, fjord, for it extends at least fifty miles into the interior, and appears to have no connection with Wibelan's Water or any other inlet of importance. Almost every depression on its northern side is occupied by a glacier, which generally fills it nearly to the brim, and, with but one exception, these glaciers are only terminated by the sea; but along its southern shore are some four or five bays of various sizes, and between them various valleys which, being quite free from ice, are more or less fertile and afford sufficient pasturage for numerous herds of *Rangifer tarandus*. These deer are tolerably abundant: they are certainly smaller than the Lapland reins, whether wild or tame; and though I can hardly profess to speak generally on the subject, yet all the antlers which I saw in Spitsbergen seemed to me to be slighter in the beam than those of the continental race; nevertheless, the points being in old stags considerably elongated, the expanse of antler was not much inferior. The average type of a good Spitsbergen head is very well represented by the first figure in the 'Fauna Boreali-Americana' (vol. i. p. 240), of the so-called barren-ground caribou (*Cervus tarandus*, var. *α. arctica*, Richardson); and it is probable that the same causes which influence

* Öfversigt af Kongl. Vetenskaps-Akademiens Förhandlingar, 11 Febr. 1863.

† P.S. August 23, 1865. More recent investigations have led me to believe that the *Uria mandti* of Lichtenstein is specifically distinct from the *Colymbus grylle* of Linnæus. I never met with the latter in Spitsbergen, all the specimens of black guillemots which I have seen in and from that country being referable to the former.

the development of the antlers in the rein-deer of the *mauvaises terres* in North America affect in like manner those of their Spitsbergen brethren. These last are said, by persons who have wintered there, not to migrate from the country; at least they or their tracks on the snow are seen "as soon as it begins to get light" in spring. At the same time it is just possible that some of them may wander over the frozen sea by way of Giles Land—and other islands, perhaps, of which we have as yet no knowledge—to Nova Zembla, and so on to the country of the Samoides. Certainly a hind killed by my friend Mr. Graham Manners-Sutton had one ear slit in a manner that was recognized by some of the "Semmoline's" crew (most of them Quæns) as a mark of ownership. I must, however, add that, adverse as I am to doubt the technical knowledge of an expert, the slit in question seemed to me as if it might have been very well caused by another deer in fighting, or, even if it were of human origin, such as might have been made by some one who had caught the animal when a calf, and let it go again; but this last solution of the difficulty excited a laugh at my simplicity among the Quæns, who could not conceive it possible that a hungry hunter should show compassion towards the very youngest deer. All that we saw the first week of our being in the country still retained a considerable quantity of their nearly white winter clothing, thus rendering their detection, when viewed against the dark-coloured ground, a very easy matter, even at a great distance. These animals also were in poor condition, contrasting in this respect strongly with those killed about a month later, when their bodies on being flayed were found to be covered with fat nearly two inches thick. At this time they had entirely got rid of their overcoats, and were clothed entirely in a short but close felt of dark mouse-colour. Judging from the gralloch, in the summer, lichens seem to form only a small article in their diet, their food then consisting chiefly of mosses, grasses, and any other herbage.

The arctic fox (*Canis lagopus*) is pretty numerous along the shores of Ice Sound; and we not only frequently saw examples of it, but in the immediate neighbourhood of the cliffs wherein the Alcidae were nesting, one could, by listening almost at any time in the twenty-four hours, hear its yapping bark. It is of course the chief enemy of all the different kinds of birds, and their dread of it appears to influence them greatly in their choice of breeding-quarters. What the foxes do to get a living in winter, when the birds have left the country—for I imagine that the ptarmigan (*Lagopus hemileucurus*) is the only species

that is permanently resident—is one of the most curious questions that has presented itself to my mind for some time. The greater number of them are said to remain on the land, and to be as active during the polar night as they are in summer; yet there are no berries by which they might eke out their existence, and there can be no open water, on the margin of which they might find food, within miles of their haunts. The most natural explanation that occurs to one is that they lay up a stock of provisions; but nobody, that I am aware of, has ever found such a store closet,* or has observed any tendency to hoarding in their habits. In Spitsbergen I believe that none of the varieties known as the blue, the black, or the silver fox have been noticed. The summer pelt does not differ from what it ordinarily is in other countries, and the winter coat seems to be invariably white.†

We noticed two species of Phocidæ in the waters of Ice Fjord. I am indebted to Mr. Malmgren for the information that these are the *Callocephalus foetidus* and *Phoca barbata* of Dr. Gray's 'Catalogue of Mammalia in the British Museum.' The former is called by the Norwegians who frequent the coast of Spitsbergen "steen-kobbe," or stone-seal, probably because it is usually seen near rocks, or at any rate at no great distance from land; the latter is known as "stor kobbe," great seal, or less frequently "blaa kobbe," blue seal. How this last name came to be applied to it I do not know. As far as I can judge, it is very inappropriate. When dry, its fur is of a dirty yellowish white; and a beast of this species lying on a floe has exactly the appearance of a lump of discoloured ice, so that the hunter often takes one for the other. In the water it seems to be much of the

* Since the above was written, it has occurred to me that a considerable collection of shells of *Mya truncata*, which I found one day on the moraine of a glacier in Safe Haven, may possibly have been due to the causes suggested in the text.

† I have never seen it remarked, though it is unquestionably the case, that nearly all the Icelandic examples of *Canis lagopus* are "blue" foxes; that is to say, their winter coat is of nearly the same colour as their summer coat. This fact, I think, must be taken in connexion with the comparatively mild climate which Iceland enjoys in winter, and, if so, is analogous to the circumstances of the alpine hare (*Lepus timidus*, Linn., non auct.) always becoming white in winter in Scandinavia, generally so in Scotland, and but seldom in Ireland. The common squirrel (*Sciurus vulgaris*) is another case in point; and all three may be considered illustrative of the vexed questions of the specific distinctions between the great northern falcons (*Falco gyrfalco*, *F. candicans*, and *F. islandicus*) and of the specific identity of the red and willow grouse (*Lagopus scoticus* and *L. albus*).

same colour as most seals—a dark iron-grey above, lighter beneath. It is a very powerful animal: I saw one that had received three Enfield bullets through the nape of its neck, and had been bleeding profusely for about half an hour; yet it nearly succeeded in capsizing a large whale-boat with five men in her, owing to the clumsiness of the harpooner. We constantly saw this species at a considerable distance from land—ten to twenty miles, off the west coast of Spitsbergen, mostly between Bell Sound and Ice Fjord; and a young male of the previous year was shot from the deck of the yacht, and afterwards harpooned, on the 29th July, about fifteen miles from South Cape.

We saw no other mammals in Ice Fjord. Our pilot pointed out to me one day a place where, many years ago, a *jægt's* crew, of which he himself was one, killed nine polar bears; but no such good fortune attended us. This same man informed me that he knew of the occurrence in Spitsbergen of a "*hermelin*," a species which has not hitherto been recorded from that country, though it is probable that the "creature, somewhat larger than a weasel, with short ears, long tail, and skin spotted white and black," stated to have been seen on Low Island by Dr. Irving in Lord Mulgrave's Voyage,[†] was nothing else but *Mustela erminea*.

I must here mention the pleasure it was to me, and, I am sure, to all the other members of our party, to fall in with the Swedish Scientific Expedition, who are engaged in making a series of preliminary surveys, preparatory to measuring an arc of the meridian, in Spitsbergen. To Professors Nordenskjöld and Dunér and Herr Malmgren our best thanks are due for their kindness in furnishing us with much valuable information, the results of their former arduous explorations in this distant country.

On leaving England there had been two points in the Ornithology of Spitsbergen to which I had especially meant to apply myself. The first was the obtaining of a good series of specimens of the Spitsbergen *Lagopus*, a single example of which, brought from that country in 1855 by my friend Mr. W. Sturge and the late Mr. E. Evans, had been described by Mr. Gould in our '*Proceedings*' for 1858 (p. 354) as a distinct species, under the name of *L. hemileucurus*: the second was the determination of the large species of wild goose, which the same gentlemen found breeding on the shores of Ice Fjord (Ibis, 1859,

[†] 'A Voyage towards the North Pole undertaken by His Majesty's command, 1773.' By Constantine John Phipps. London: 1774, page 58.

pp. 171, 172). Of the latter, as I have already mentioned, we saw a considerable number; and though we failed in our efforts to obtain a specimen, yet, through Mr. Malmgren's kindness, I am able to declare that the species is *Anser brachyrhynchus*, since I saw and examined two examples in his possession. Of the first, though, I regret to say, unsuccessful in finding out its haunts, I likewise had the pleasure of being shown by Mr. Malmgren an adult male, killed but a few days previously, and still unskinned. Its plumage, however, presented scarcely any trace of the great vernal change which takes place in this group of birds; and, except that I am confident that the ptarmigan of Spitsbergen is distinct from that of continental Europe and Britain, I hardly like to form an opinion respecting its specific distinctness from the ptarmigan of Iceland, Greenland, and Labrador, which I am inclined to consider as forming but one species, to which the name *L. rupestris*, being the oldest, should probably be applied.

After passing an agreeable week in Ice Fjord, and being joined by our Norwegian consort, we returned southwards, and proceeded towards the most western of the Thousand Islands. Here some of our party were transhipped to go to the eastward in the 'jægt' in search of walruses, while the 'Sultana' made another attempt to ascend the Stor Fjord; but, finding the ice at a distance of about twenty miles above the bight still unmoved, she was compelled to retrace her course, and await the return of the jægt party off the Thousand Islands. In Stor Fjord we made the acquaintance of the third species of seal known in Spitsbergen, the very widely distributed *Pagophilus grœnlandicus* of Dr. Gray's Catalogue. This animal is known to the frequenters of the coast as the "Jan-Mayen kobbe" and "svart-side;" but most generally as the "springer," from its lively actions in the water. It is of a social disposition, and we saw it in herds not less than fifty in number. These were very fond of swimming in line, their heads alone above water, engaged in a game of "follow-my-leader;" for on the first seal making a roll over, or a spring into the air, each seal of the whole procession, on arriving at the same spot, did the like, and exactly in the same manner. While viewing this singular proceeding (and I had many opportunities of doing so), I could not but be struck with the plausibility of one of the suggested explanations of the appearance which has obtained so widespread a notoriety under the name of the "great sea serpent." If any rule of the game in which *Pagophilus grœnlandicus* loves to indulge ever would permit the leading seal to swim (say) one-third out of water,

as I have often seen *Phoca barbata* do, I could quite understand any person, not an unromantic naturalist, on witnessing for the first time such a sight as I have tried to describe, honestly believing that the mythical monster was actually before his eyes. I never had the opportunity of closely examining a "springer;" but one learned immediately to distinguish this species from the other two I have mentioned: not only its wonderful activity in the water, but its elongated head (even when the size of its body, just about intermediate between *P. barbata* and *Callocephalus foetidus*, was not to be ascertained) was quite sufficient for that purpose. This species resorts in great numbers to the ice in the neighbourhood of Jan Mayen, whence one of its common names; and in former years several vessels were annually equipped at Tromsø and Hammerfest in pursuit of it; but I believe that of late this practice has been a good deal discontinued.

Although none of our party were lucky enough to get a glimpse of a walrus, I cannot refrain from mentioning here some circumstances connected with the history and habits of that curious and mighty beast. It is pretty well known that in the summer of 1853 a living example was deposited in our gardens, which, however, after a few days languished and died, probably from having been fed on a diet so unnatural to it as oatcake.* Yet this is by no means the only instance of this animal being brought alive to England. So long ago as 1608, the ship "God-speed," commanded by Master Thomas Welden, performed a voyage to Cherie, now commonly called Bear Island, and in the account of the expedition it is written—

"On the twelfth [July] we took into our ship two young morses, male and female, alivie: the female died before we came into *England*: the male lived about ten weeks. When wee had watered, we set sayle for *England* about foure of the clocke in the morning. * * *

"The twentieth of August, wee arrived at *London*; and hauing dispatched some priuate businesse, we brought our liuing morse to the Court, where the king and many honourable personages beheld it with admiration for the strangenesse of the same, the like whereof had neuer before beene seene alivie in *England*. Not long after it fell sicke and died. As the beaste in shape is very strange, so is it of strange docilitie and apt to be taught, as by good experience we often proued."†

* See 'Zoological Sketches,' by J. Wolf; edited by P. L. Selater. Cf. also J. E. Gray, P. Z. S. 1853, p. 112.

† HAKLUYTUS POSTHUMUS OR PURCHAS HIS PILGRIMES, &c. By Samuel Purchas, B.D. London: 1624. vol. iii. p. 560.

Now surely what a rude skipper, in the days of James I., could without any preparation accomplish, this Society ought to have no great difficulty in effecting; and I trust that the example may not be lost upon those who control our operations. From inquiries I have made, I find it is quite the exception for any year to pass without an opportunity of capturing alive one or more young examples of *Trichechus rosmarus* occurring to the twenty or thirty ships which annually sail from the northern parts of Norway, to pursue this animal in the Spitsbergen seas. It has several times happened that young walruses thus taken are brought to Hammerfest; but, the voyage ended, they are sold to the first purchaser, generally for a very trifling sum, and, their food and accommodation not being duly considered, they of course soon die. Lord Dufferin bought one which had been taken to Bergen, and succeeded in bringing it alive to Ullapool;* and Mr. Lamont mentions another which he saw in the possession of Captain Erichsen.† In making an attempt to place a live walrus in our Gardens, I do not think we ought to be discouraged by the bad luck which has attended our efforts in the case of the larger marine Mammalia. Every person I have spoken with on the subject corroborates the account given by honest Master Welden of the "strange docility" of this beast; and that in a mere financial point of view the attempt would be worth undertaking is, I think, manifest. To the general public perhaps the most permanently attractive animals exhibited in our Gardens are the hippopotamuses and the seals. What then would be the case of a species like the walrus, wherein the active intelligence of the latter is added to the powerful bulk of the former? There is also another consideration why we should make the attempt. In a few years it is probable that the difficulties of obtaining a live example of the walrus will be much greater. Its numbers are apparently decreasing with woful rapidity. The time is certainly not very far distant when *Trichechus rosmarus* will be as extinct in the Spitsbergen seas as *Rhyina gigas* is in those of Behring's Straits. I see no reason to doubt the assertion, or perhaps it would be safer to say the inference, that in former days walruses habitually frequented the coasts of Finmark; in the sixteenth and seventeenth centuries they were certainly abundant about Bear Island: they are spoken of there, as "lying like hogges upon heaps" by the old writer I have before quoted; yet for the last thirty years probably not one has been seen

* 'Letters from High Latitudes,' pp. 387—389.

† 'Seasons with the Sea-Horses,' pp. 26, 27.

there. Now they are hemmed in by the packed ice of the Polar Sea on the one side and their merciless enemies on the other. The result cannot admit of any doubt.

But to continue my story from this digression, which I hope, however, may not be without its use. On the 10th of August our two ships again joined company; and, finding it was useless attempting either to get up the Stor Fjord or sail further to the eastward, we again rounded the South Cape and made for the northward. The season, however, being now so far advanced, our pilot declined the responsibility of taking the yacht further north than Ice Fjord; and accordingly, after having to steer considerably to the westward to avoid the heavy ice which beset the coast about Horn Sound, we found ourselves, on the afternoon of the 14th, once more at our old anchorage in Safe Haven. Here we remained another week, most of our party finding plenty of occupation in deer-stalking; but I was not able to add much to my stock of zoological knowledge. The deer were now in magnificent condition, and nineteen were shot, making, with those obtained the week the yacht was there in July, a total of forty-seven. On the night of the 17th the salt water of the Haven was frozen over, and two days afterwards the sun set. On the morning of the 21st we weighed anchor, homeward bound. On the 24th we spoke a Norwegian jagt, engaged in the fishing of *Scymnus borealis*, an example of which was hauled up just as we passed.* The same day we sighted Bear Island, which on our outward voyage we had not seen, owing to the fog; and on the 27th we reached Hammerfest.

It remains for me to add a few words on the Cetaceans we saw. I have already mentioned *Beluga catadon*, which we observed also on two other occasions. This is the only species of which I can speak definitely, though we certainly saw at least four others. Of these, the

* This fishery has of late years assumed considerable importance. The vessels employed in it mostly do not go so far north, but keep about midway between Bear Island and the North Cape of Europe. There they anchor in deep water with a light cable, which they cut if it comes on to blow suddenly. The sharks are caught with a baited hook at the end of a very long line. As soon as one is hooked, he is hauled up on deck by a windlass, and beaten on the head until he is motionless. His liver, which alone is required of him, is then cut out; and, his entrails being fully inflated with air, his body is heaved overboard to float away quite clear of the vessel. The cause of this apparently wanton cruelty is alleged to be the difficulty of otherwise disposing of the carcass; for the fishermen say that if the animal were killed, they would not catch another shark until the dead one was entirely eaten up by his brethren, a process that might involve a delay of some days.

first was a large black fin-backed whale, noticed three or four times; the second a smaller animal, perhaps about thirty or forty feet long, of which some half a dozen came and played round the yacht on the 12th of August. In general form, especially in the *esocine* shape of the head, these corresponded very closely with the engraving given by Dr. Scoresby (*Arctic Regions*, vol. ii. pl. 13, f. 2) as that of *Balæna rostrata* (= *Balænoptera rostrata*, *J. E. Gray*); but I rather hesitate to refer them positively to that species, on account of their colour, which was apparently of a uniform light reddish brown. I had an excellent opportunity of observing these whales, for they kept with us about a quarter of an hour, sometimes passing under the ship, and often coming up close alongside, within perhaps thirty yards. On the following day I saw a school of grampuses, with extremely long and high dorsal fins; but this was the only occasion on which the species was noticed. Some kind of porpoise, on the contrary, was seen more than once.* In addition to these Cetaceans, the right whale (*Balæna mysticetus*) and the narwhal (*Monodon monoceras*) are well known to inhabit the Spitsbergen seas. Mr. Malmgren, in his careful paper before alluded to, enumerates six or perhaps seven species of whales, not reckoning a porpoise. We therefore have seven or eight Cetaceans, seven Carnivores (including *Ursus maritimus*, on which I have no remark to make) and one Ruminant as the sum total of the Mammalian Fauna of Spitsbergen. Without extending these notes by going into details, I may here state that I think the bird-fauna cannot be reckoned at more than twenty-seven species. We therefore have the singular result of a country, say as large as Ireland, where the number of Mammalian bears to the number of Ornithic species the ratio of 15 or 16 to 27.

ALFRED NEWTON.

The Meadow or Bank Vole (*Arvicola riparia*, *Yarrell*) at *Lytham*.—On the 3rd of April, while removing some potatoes from a pit, I found an individual of the above species lying in a kind of nest, which apparently had formed its hybernaculum during the winter; it was dead and partially decayed. The nest was made among the

* I feel very confident of the truth of this statement; but I find no mention made of any porpoise in the Spitsbergen seas by either Scoresby or Malmgren. This fact I unfortunately had not noticed until my return home; so that (porpoises being in general of so common occurrence on a sea voyage) I neglected to record, as I otherwise should certainly have done, the dates and localities of their appearance. It is of course possible that what I took to be porpoises were only the young of some larger Cetacean; but I do not think this was the case.

potatoes, about eighteen inches from the ground, and was composed of soft short straws. In the same pit I captured a large male longtailed field-mouse. It was ensconced in a nest built on the ground. This nest was more compact and made of finer materials. The potatoes were gnawed, and had served for their winter food. The meadow vole had probably been worsted in a battle with the mouse, and had crept into its retreat and died.

Length of vole from nose to end of tail, without projecting

hairs	-	-	-	-	-	-	4 inches 11 lines.
Length of tail	-	-	-	-	-	-	1 inch 9 "
" ear	-	-	-	-	-	-	4 "

Dimensions of meadow vole given by Mr. Macgillivray, in 'Naturalists' Library':—

Total length	-	-	-	-	-	-	5 inches 2 lines.
Tail	-	-	-	-	-	-	1 inch 9 "
Ear	-	-	-	-	-	-	6½ "

I have enclosed the remains of the vole, in order to be certain that it is the species above named.—*George Roberts; Lofthouse, Wakefield.*

Rats climbing Trees.—In the April number of the 'Zoologist' (S. S. 158), Mr. Peers mentions as an unusual circumstance the fact of a rat climbing a hedge. From one cause or other rats will occasionally take to trees and bushes, and I have met with several instances of this climbing propensity. When pressed by ferrets and obliged to bolt from their holes in a hedge-bank, they will sometimes endeavour to effect an escape by ascending the hedge, and, should it be a closely-clipped fence, will work their way along it most expeditiously. It does not, however, necessarily require the strong incentive of a ferret in the rear to make these expert foragers take to timber. I once shot a rat as it sat on the slender bough of a willow overhanging a pond, and about eight feet above the water: it had gone out so far on the branch that I do not think it could possibly have retraced its steps without falling into the water. Last summer I saw a pair of brown rats working their way along a closely-growing fence; they were in the centre of the hedge and about a foot from the top: having my gun with me at the time I took the opportunity of putting a stop to the career of one, the other escaping. My idea is that they were out on a birdnesting expedition. I have strong suspicions that amongst their many other delinquencies rats not unfrequently take to the hedges to search for eggs, as where they abound I have frequently found, in closely-clipped fences, nests with the eggs abstracted, and in places where I am certain no prying birdnester had been. I recollect very well, as a boy, when stopping at an old country house in this county, great complaints were made about the rats stealing the nuts from a row of fine old filbert-trees in the garden; a bank near these trees was a great summer haunt of these pests, and was tunnelled in every direction with their burrows: the gardener, who kept a gun ready loaded for the purpose, was in the habit of shooting them as they sat perched on the boughs of the filbert-trees.—*John Cordeaux; Great Cotes, Ulceby, Lincolnshire, April 5, 1866.*

[See also 'Letters of Rusticus,' p. 119, where is given a rather detailed account of a rat's climbing when pursued by a weasel, which at last killed it.—*E. Newman.*]

*Habits of the Shorttailed Petrel (Nectris brevicaudus).**

THIS bird is an inhabitant of the seas surrounding Tasmania and the islands in Bass's Straits, to some of which, but especially the Green Island, it resorts during the summer in countless numbers, for the purpose of breeding and rearing its young. I visited this island in January, 1839, when, although the season was far advanced, both eggs and young were still so numerous as to excite my astonishment. I had previously heard much of this great nursery of petrels, and might have added much to the length of this paper by recording my own observations; but so much has been written by others that I prefer giving their statements, notwithstanding a little repetition in the details comprised therein. Mr. Davies, in the second volume of the 'Tasmanian Journal,' states that "About the commencement of September these birds congregate in immense flocks, and shortly afterwards proceed at sunset to the different isles upon which they have established their rookeries. Here they remain during the night for the space of about ten days, forming their burrows and preparing for the ensuing laying season. They then leave, and continue at sea for about five weeks.

About the 20th of November, at sunset, a few come in to lay, and gradually increase in numbers until the night of the 24th. Still there are comparatively few, and a person would find some difficulty in collecting two dozen eggs on the morning of that day.

It is not in my power to describe the scene that presents itself at Green Island on the night of the 24th of November. A few minutes before sunset flocks are seen making for the island from every quarter, and that with a rapidity hardly conceivable; where they congregate together, so dense is the cloud, that night is ushered in full ten minutes before the usual time. The birds continue flitting about the island for nearly an hour, and then settle upon it. The whole island is burrowed, and when I state that there are not sufficient burrows for one-fourth of the birds to lay in, the scene of noise and confusion that ensues may be imagined. I will not attempt to describe it. On the morning of the 25th the male birds take their departure, returning again in the evening, and so they continue to do until the end of the season.

* * * Every burrow on the island contains, according to its size,

* Extracted from Gould's 'Handbook of the Birds of Australia,' vol. ii. p. 464; and previously printed in the 'Ibis' for 1859, p. 397.

from one to three or four birds, and as many eggs; *one* is the general rule. At least three-fourths of the birds lay under the bushes, and the eggs are so numerous that great care must be taken to avoid treading upon them. The natives from Flinders generally live for some days on Green Island, at this time of the year, for the purpose of collecting the eggs, and again in March or April for rearing the young birds. * * * Besides Green Island, the principal rookeries of these birds are situated between Flinders Island and Cape Barren, and most of the smaller islands in Furneaux's group. The eggs and cured birds form a great portion of the food of sealers, and, together with the feathers, constitute the principal articles of their traffic. The mode by which the feathers are obtained has been described to me as follows:—

"The birds cannot rise from the ground, but must first go into the water, in effecting which they make numerous tracks in the beach similar to those of a kangaroo; these are stopped before morning, with the exception of one leading over a shelving bank, at the bottom of which is dug a pit in the sand; the birds finding all avenues closed but this, follow each other in such numbers that, as they fall into the pit, they are immediately smothered by those succeeding them. It takes the feathers of forty birds to weigh a pound; consequently sixteen hundred must be sacrificed to make a feather bed of forty pounds weight. Notwithstanding the enormous annual destruction of these birds, I did not, during the five years that I was in the habit of visiting the Straits, perceive any sensible diminution in their number. The young birds leave the rookeries about the latter end of April, and form one scattered flock in Bass's Straits. I have actually sailed through them from Flinder's Island to the heads of the Tamar, a distance of eighty miles. They shortly afterwards separate into dense flocks, and finally leave the coast. The old birds are very oily, but the young are literally one mass of fat, which has a tallowy appearance, and hence I presume the name of 'mutton bird.' To this I may add that the young birds are very good when fresh, and the old birds after being skinned and preserved in lime are excellent eating. It will be seen that I have alluded in forcible terms to the great abundance of this species, in confirmation of which I annex the following extract from Flinder's Voyage, vol. i. p. 170:—

"A large flock of gannets was observed at daylight, and they were followed by such a number of the sooty petrels as we had never seen equalled. There was a stream of from fifty to eighty yards in depth,

and of three hundred yards or more in breadth; the birds were not scattered, but were flying as compactly as a free movement of their wings seemed to allow; and during a full *hour and a half* this stream of petrels continued to pass without interruption at a rate little inferior to the swiftness of the pigeon. On the lowest computation I think the number could not have been less than a hundred millions. Taking the stream to have been fifty yards deep by three hundred in width, and that it moved at the rate of thirty miles an hour, and allowing nine cubic yards of space to each bird, the number would amount to 151,500,000. The burrows required to lodge this quantity of birds would be 75,750,000; and allowing a square yard to each burrow, they would cover something more than $18\frac{1}{2}$ geographic square miles of ground."

* * * * *

"The little settlement on Vansittart's or Guncarriage Island, one of the Flinder's Islands group in Bass's Straits, lies in a cove on one side sandy, but on the other closed in by huge granite rocks, behind which the sealers have built their houses, and which serve also to shelter their boats from the sea. Tucker's (the chief settler's) house was comfortable enough. His wife was a Hindoo woman from Calcutta, active and industrious, who kept it in good order. The other men had native wives or 'gins,' as they called them, from Australia and Van Diemen's Land.

"Their original occupation was sealing, for these islands formerly swarmed with seals. In the course of time these animals became exterminated, and now their principal livelihood is derived from the mutton birds, which are found here in incredible numbers. These birds, called also sooty or shorttailed petrels (*Puffinus brevicaudus*, Gould, B. Austr. vii. pl. 56), have such long wings that, like the albatross, the largest of their tribe, they have great difficulty in rising from the ground when settled; and it is this peculiarity that makes their capture so easy. They build in holes in the ground. The islands which they frequent are burrowed over in all directions, just like a rabbit-warren. They arrive in huge flocks about the 21st of September, generally to the day, to prepare their holes and clean them out. There is tremendous fighting and quarrelling for these holes. When the birds have arrived a few days their tracks or pathways begin to be apparent, or, as the sealers say, 'they begin to show their runs,' for they go down to the sea every morning. The sealers then dig a large pit in one of the main runs, with small fences on each side leading down to it, like a funnel. When all is ready, some morning at day-

break, when the birds come out of their holes, they are driven down these runs into the pitfall. 'We rushes 'em down, sir, and they tumbles one over another into the hole,' was the way the men expressed it. They crowd down and fall in by hundreds, crushing and smothering each other until the pit is full, when the men break down the fence at the sides and let the rest escape. They generally take 2000 or 2200 in each drive. The men then jump into the hole and set to work to pick them, pulling off the body-feathers, and stuffing them into bags, and throwing the carcasses out of the hole. This lasts till noon. It is hard work, and before the end of the season their nails sometimes come off, from the continual plucking. It takes the feathers of twenty-five birds to make a pound, which sells at Launceston for twopence; but Tucker, his wife, and his pal Dick, collected a ton of feathers last year. To do this they must have killed 56,000 birds, and yet they say their numbers do not seem to decrease. The birds come back to the islands again on the 23rd of November to lay. They lay but one egg, and generally on the day or the day after they arrive: the sealers collect a good many for their use; and when the young birds are nearly full grown, they attack them again for the sake of the oil with which the old birds feed them. They thrust their hands into the hole and pull out the young bird by the head, kill it by squeezing it, and, holding it up by the legs, the oil runs out at the beak. This oil is very clean and pure, burns well and sells at Launceston at four shillings per gallon. When the young birds are full grown they are very fat. The men then pull them out of their holes, spit them and sell them. It is rather dangerous work catching them in this way, for many venomous snakes dwell in the holes, and are sometimes seized and pulled out instead of a bird."

Ornithological Notes from Shetland. By H. L. SAXBY, M.D.

(Continued from S. S. 67).

NOVEMBER AND DECEMBER, 1865.

- November 1. Wind N. A robin appeared in the garden.
 " 2. " N. A small flock of fieldfares arrived.
 " 3. " N. (frost). Flocks of twites increasing in size.
 " 5. " N. (frost). Marked decrease in the number of
 golden plovers.

- November 6. Wind N. A male blackcap warbler in the garden.
 „ 8. „ N. A female moorhen shot (the only one
 seen this winter).
 „ 11. „ N.W. Most of the redwings and greenfinches
 left.
 „ 15. „ S.W. A coot shot (the only one seen this
 winter).

Siskin.—The two siskins mentioned in my last communication (S. S. 66) were both males. After shooting them I managed to obtain some very close views of the remainder of the flock. Some individuals were rather brilliantly tinged with yellow and deeply marked with black, but others had scarcely any yellow, and as far as could be ascertained were without black upon the head. They all kept mostly to the outer branches of the trees, evidently preferring the sycamores, but for what reason I knew not until I discovered that their food consisted entirely of the Aphides which so infest that species. The whole flock was almost constantly in motion, and so eagerly did they pursue their employment that it was difficult to confine my observations to any one member of it for more than half a minute at a time. Their mode of conducting their search for food instantly called to mind the once familiar blue titmouse—a bird which I have scarcely even seen during the last ten years. Like it they seemed fond of swinging head downwards from a leaf stalk or a slender twig. Having vainly searched Macgillivray, Morris and Yarrell for a full description of the siskin in winter plumage, I venture to offer one taken from my own specimens.

Whole length	-	-	-	-	4 $\frac{3}{4}$ inches.
Wing from carpal joint to tip	-	-	-	-	2 $\frac{3}{4}$ „
Bill from front to tip	-	-	-	-	$\frac{5}{12}$ „
Tarsus	-	-	-	-	$\frac{7}{12}$ „
Middle toe and its claw	-	-	-	-	$\frac{7}{12}$ „

Sex male.

Bill dull lead, darkest at the point; under mandible paler than the upper one. *Iris* dark brown.

Head and Upper Surface.—Lore, crown and forehead shining black, most of the feathers very narrowly edged with pale greenish gray; the black upon the crown separated from the eye by a narrow streak of dull yellow; sides of the head and nape of the neck yellow mottled with dusky gray, but in the latter situation the yellow is fainter;

scapulars and upper half of the back dull olive-green, the central line of each feather stained with dusky gray; lower half of the back, including the upper tail-coverts, yellow, the central line of most of the feathers also stained with dusky gray.

Tail feathers black, the tips and outer webs narrowly, and the inner webs broadly, edged with pale yellow; the central pair of feathers have least yellow, and the shafts of all are black.

Wings.—Third quill very little shorter than the first and second, which are equal and the longest in the wing; coverts of the primaries black; those of the secondaries and tertials greenish yellow at the tip, black at the base, the two colours forming a double bar across the wing; lesser coverts similar in colour, but the black bases are nearly concealed; in the first three primaries the outer web of each is narrowly edged with greenish yellow quite to the tip, the inner web broadly edged with white nearly to the tip; secondaries, tertials and remaining primaries similar in colour to the first three primaries, but with the addition of a yellowish white patch near the base of the outer web; all of the quills have black shafts.

Under Surface.—Throat, front of neck and upper part of the breast yellow, the concealed portion of the feathers lead-gray; the yellow gradually fades into white towards the lower part of the breast; abdomen white; sides and under tail-coverts white, with some scattered stains of yellow and a few large streaks of black.

Tarsi, feet and claws light reddish brown.

The second specimen, also a male, was far less brightly coloured, but the measurements were the same as those given above.

Little Auk.—On the 15th of December, during an extremely heavy westerly gale, a living specimen of the little auk was picked up on the hill of Vallafiel, among the heather. It was a male and in very good condition, but the stomach was quite empty.

JANUARY AND FEBRUARY, 1866.

Glaucous Gull.—I am not sure when the glaucous gulls arrived, but the adults seem to have remained with us for even a shorter time than usual this winter. A very fine immature male, which had just been caught upon a cod-hook baited with a piece of fish-liver and thrown out for the purpose, was brought to me on the 10th of January.

Shag and Longtailed Duck.—The flocks of shags reached their full size about the middle of January, after which time they began to

diminish rapidly. They have not visited the bays and voes in their usual number this winter, in consequence of the great scarcity of sillocks, but their absence has resulted in almost an abundance of longtailed ducks (Zool. 9127, 9519).

Snow Bunting.—The number of snow buntings is nearly always far less in mid-winter than in spring and autumn. This season, however, the almost entire absence of frost and snow, and the consequent openness of the ground, have caused many very large flocks to remain.

Golden Plover.—The same cause has also, in a great measure, induced the golden plovers to remain longer than usual upon the hills, instead of following their habit of visiting the shore at this season. They are now in fine condition for the table, and are quite free from the rank fishy taste which they invariably acquire after feeding, even for a few days, upon the beach.

Herring Gull.—Not the least among the evil results of a scarcity of fish, is the damage done to the turnips by the herring gulls. In a large field in this neighbourhood the crop is most seriously injured, for although, at first sight, the rows look well enough, nearly one half of the roots have been scooped quite hollow. The birds seem to dislike the outer portion, interfering with it as little as possible, and only removing enough to enable them to reach the softer parts within. Sometimes a gull may be seen with its head completely hidden, but, as if conscious of its danger, constantly withdrawing it and looking around to prevent a surprise.

Goldeneye.—On the 1st of February I visited the fresh-water loch at Belmont, where one seldom fails to meet with goldeneyes at the proper season. There were numerous small flocks, besides many scattered individuals, upon various parts of the loch, and as I watched them from my concealment behind a ruined wall, I had abundant evidence that some were already pairing. Their movements were precisely similar to those of the common wild duck. The males occasionally uttered a peculiar, gentle, rather shrill cry. I shot a splendid adult male.

Shag.—Shags are already assuming their breeding plumage. I first observed the change on the 1st of February.

Hen Harrier.—A fine hen harrier visited Baltasound about the beginning of February. Several times when I was without a gun it flew close past me.

Woodcock.—On the 4th of February, after a succession of gales from

S.W., I observed several woodcocks upon the stony hill above Colvidale, where they still remain. The people tell me that a winter seldom passes without a few of these birds being seen there.

Black Guillemot.—On the 6th of February I first saw black feathers appearing upon the breast of a last year's bird.

Sky Lark.—The song of the sky lark was first heard on the 18th of February—the first fine day this year.

HENRY L. SAXBY.

Baltasound, Shetland, February 28, 1866.

Ornithological Notes from North Lincolnshire.

By JOHN CORDEAUX, Esq.

(Continued from Zool. S. S. 132.)

MARCH, 1866.

Tits.—Five species of these lively little birds are common to North Lincolnshire, namely, the great, blue, cole, marsh and longtailed tit : of these the marsh tit is decidedly the rarest. It is occasionally met with in our larch plantations, in company with the blue and cole tits and goldencrested wrens. All the tits, with the exception of the marsh, remain with us during the year. I am not aware that the marsh tit nests in this neighbourhood.

Rook.—Rooks commenced building the first week in March ; they are particularly partial to the use of the long slender twigs of the birch, and in this county, where building materials are somewhat scarce, will do considerable damage to these trees by breaking off the twigs, completely spoiling the beauty of the tree, and giving it a cropped appearance. They invariably line their nests with wool, short straws, and dried bunches of grass, pulled up during the winter by these industrious foragers when searching for grubs, now again to become useful as a lining for their nests. So much has from time to time been written about these birds that it would be difficult to mention any new fact concerning their habits. In this treeless land they frequently build on willows, and I know of several instances of these trees having been used for this purpose for many years : there is one now near my house containing eight nests, and in our marsh district I lately observed a pair of these birds building on the boughs of a low willow, almost overhanging a public footpath.

Knot.—There have been some large flocks of knots on the flats during the month, as well as a considerable increase in the number of wild fowl visiting the Humber. On the 16th of March I observed knots, dunlins, ringed dotterells, curlews, bartailed godwits, gray plovers and blackheaded gulls feeding on the fore-shore, and a large flock of widgeons on the water. With a good telescope there is no difficulty in making out the various species of birds on the flats, and on a clear day the least variations in plumage are distinguishable. When knots and dunlins are feeding together the knots may be known, not only by their size, but also by the grayer tint of the plumage: at this season the under parts of dunlins look pure white, while in knots the same parts are gray. Knots keep much closer together when feeding than dunlins, the latter birds rambling wildly about, constantly crossing and recrossing each other's tracks, while knots generally feed going straight forward, and not far from the edge of the water, their heads being all turned in the same direction. While lately watching a large flock of these birds feeding on the fore-shore I observed one which, instead of running after the manner of its kind, got over the ground by hopping; the other leg was drawn up, and the foot hung dangling by the skin, probably having been cut through by a single shot; the poor bird had a very singular appearance thus hopping along like a great thrush; in other respects it did not appear to suffer from the mutilation, as it kept constantly plunging its bill into the soft "warp," all the time, after its own fashion, keeping well up with its companions. When knots are feeding they walk with the legs very much bent and the head thrust forward, after the manner of a waterhen, giving them somewhat of a squat appearance. In the illustration of this bird, as given in Morris's 'Ornithology,' the attitude is admirably true to nature. Gray plovers walk with the legs nearly erect, and the body carried horizontally; the head is drawn in, giving the bird a somewhat dumpy and thick-necked appearance. When feeding they walk slowly forward for a few paces, rapidly stoop and pick up some object from the mud, without, however, thrusting their bill into the ooze; then for a time remain perfectly motionless, as if watching to see whether they are observed, their wonderfully sharp eyes looking like a large bright black bead; then they move slowly forward again for a few paces and repeat the process. They have none of that bustling activity so characteristic of knots and dunlins, and are at all times a shy, wild, and suspicious bird.

Bartailed Godwit.—Several bartailed godwits on the fore-shore

during the last fortnight. These birds bore deep for their food, after the manner of curlew and whimbrel, plunging their bill into the soft ooze up to the forehead. I have never shot the black-tailed species on the flats, although it probably occasionally visits the Humber during the period of the spring and autumn migrations. Two years since, in May, while watching through a telescope a small flock of godwits, I observed amongst them one the whole of whose under parts, except the belly, were a dark chestnut colour.

Blackheaded Gulls.—Have seen several of these gulls about the marsh district during the last winter. As far as my observations go, they appear to be the first of our shore birds which assume the distinctive summer dress: during the last week in February I observed one which had then nearly acquired the brown summer head-dress.

Pied Wagtails.—There was a considerable accession to the number of pied wagtails in this neighbourhood on or about the 28th of this month.

JOHN CORDEAUX.

Great Cotes, Ulceby, Lincolnshire,
March 31, 1866.

Ornithological Notes from the Isle of Wight.

By Captain HENRY HADFIELD.

(Continued from S. S. 178).

MARCH, 1866.

Spotted Woodpecker, &c.—I have lately heard of a spotted woodpecker (*Picus major*) having been met with in the island fifty years ago. My informant, Mr. J. Nobbs, a gunmaker, of Newport (well known to me), in replying to my queries, says, "On the 2nd of May, 1815, wandering over St. George's Down, towards Rowlands, I seated myself under a lofty tree: the hawthorn was blooming, and I had begun to muse on the beauties of the scene, when presently a tapping sound was heard, and on looking up I observed, some fifteen yards away, a spotted woodpecker settled on the trunk of an old but stunted tree. The tapping would cease for a time, when the bird with head erect watchfully sat poised on its out-spread tail, then, resuming its spiral ascent, would expertly extract from the decaying bark its insect food." This woodpecker, as well as those previously referred to, were found

in East Medina ; but I have lately heard of instances of their occurrence in West Medina. Mr. Robert Gibbs, a gentleman residing in the latter division, informs me that a woodpecker was shot at Yarmouth by a man named Udal, many years ago ; and John Pedder, who I have known for years, tells me that when gamekeeper on the Gatcombe and Swainston estates, he shot some spotted woodpeckers. From the description given, as to size, &c., they must have been of the greater spotted species. One was stuffed, but he does not know what became of it. The first was killed at Gatcombe, the next near Newtown, and a third somewhere in the neighbourhood of Yarmouth.

John Pedder tells me (and his statement is confirmed by Mr. Nobbs, who witnessed it) that the pheasants bred and reared by him would, months after being turned out, leave the cover on hearing his whistle, and flock around him and on him, perching on his arms and shoulders to be fed ; but the appearance of a stranger would scare them all back to the woods. Two or three hundred pheasants together and on the wing must have been a grand sight, and people came to the Lodge to witness it.

Mr. Nobbs has had a cockatoo (*Psittacus brachyurus-albus*) for thirty-eight years, and it was said to be about two years old when given to him. I remember seeing it thirty-three years ago ; but, notwithstanding its great age, it is apparently as well and lively as ever. Mr. Gibbs tells me that he shot a pied flycatcher some years ago at Thorley Farm, near Yarmouth. This is a rare visitant, not having been met with but once or twice before, and that in the same neighbourhood ; he also informs me that he killed two hawfinches at Bowcombe last year, and a hoopoe two years before. Three other hoopoes had been previously shot by him on Thorley Farm : he mentions having once killed, on Cridmore Moor, near Rookley, two spotted crakes.

Bluethroated Warbler.—March 6th. A pair, I believe, of these rare birds was seen to-day by the brook-side, though, getting but a momentary view of one, I could not be quite sure ; however, I shall watch them closely this season, and endeavour to ascertain whether they breed with us or not.

Stonechat.—March 11th. Is paired, but it is difficult to ascertain the exact time of pairing of this and many other species, and there is reason to believe (as I have already stated) that the raven, for instance, remains paired all the year round. . That the hedgesparrow does, I have long thought, having observed a pair about my garden-hedge for

years, and one of the birds was referred to (Zool. 5204) as being afflicted with tubercular excrescences. That both pigeon and dove form a permanent alliance I have little doubt, and there is reason to believe that the swallow and martin pair for life. I would suggest to those who have aviaries of our native birds on a large scale, that they direct their attention to the matter, and observe closely the habits of the different species in this respect; not that their doings in captivity, where their choice must necessarily be more or less restricted, can be altogether relied on, still it might tend to throw light on a subject at present but little understood.

Redthroated Diver.—Though unable to fix the time of their departure to a day, I may safely say that the greater part had left our coast by the end of February, but I have heard of a few being seen as late as the first week in March in Sandown Bay, their usual haunt. And the large flock of ducks (*Anas boschas*) that frequented the bay, must have taken their departure about the same period, without having their ranks thinned. A more wary flock I never saw; there was no getting within half a mile of it.

Black Scoter.—March 20th. Three were observed off Shanklin.

Tillark.—March 22nd. I believe the species is nesting, having seen one to-day carrying material.

Rook.—March 26th. Our rooks are now busily engaged repairing the nests, which have been greatly damaged by the late gales: the work was suspended on the setting in of the frost in the middle of February. As usual, they are robbing their neighbours right and left when opportunity offers, but if detected there is a momentary clamour, and not unfrequently a fight. They are unusually late in breeding, but the weather has been unseasonably cold as well as stormy; thermometer ranging from 32° to 45° throughout the greater part of the month.

Chiffchaff.—March 26th. This, the smallest and perhaps the earliest of our migratory birds, has just made its appearance, two having been observed to-day sporting among the upper branches of the flowering but leafless elms at Bonchurch, where the chiffchaff was first seen last year on the 27th of March. Thermometer 48°; wind south-west.

Wheatear.—March 27th. Found two to-day in the newly-ploughed lands bordering the sea-cliffs, between Shanklin and Sandown. This species and the chiffchaff arrive so nearly together that I am as yet unable to decide which comes first.

Sky Lark.—March 27th. Still gregarious, but a pair or two were

observed—the male with crest erect, but not soaring, nor have I heard its song.

Song Thrush, &c.—A nest found early in the month containing three eggs. A pair of blackbirds are again building in the ivy high up on the house, the female as usual doing all the work: though raining heavily at the time, she was in and out of the nest every three or four minutes, but generally alighting on the verandah for a second before flying up to the nest.

In reply to the editorial note (S. S. 174), I beg to say that though unable, in every instance to give the particulars, all that can be relied on is detailed with scrupulous accuracy, and the names of my informants given when I have permission to do so. Mr. Nobbs's account is circumstantial enough, and is given almost verbatim.

HENRY HADFIELD.

Ventnor, Isle of Wight,
April 2, 1866.

The Migratory and Wandering Birds of the County Dublin, with the Times of their Arrivals and Departures, as far as the Grallatores. By HARRY BLAKE-KNOX, Esq.

As you invited me to send you an account of the summer migrants to this county, I waited till the end of last year (1865), that I might be enabled to give the general time of the arrivals and departures of the migrants for the last five years, and though I am not strictly keeping within bounds in thus giving a list of all the migrants, both winter and summer, to this county, still I hope that the subject may be an excuse for taking up the pages of the 'Zoologist' by what may appear to be only a local list—things I have a great antipathy to, unless the local lists of a country, or a large section of a country, be united into a table; they are then of great advantage, as showing the distribution of species, but merely as local lists they are seldom read. Another point, too nice for my experience of migratory birds, is giving the exact date on which a species arrives or departs: true, the bird may first have been noticed on that date, or that average date, by that particular person, but another may have seen it before. I therefore avoid being dogmatical as to a date, and divide the month into three sections—first, middle and end, of ten days each; I never found the latitude too much or too little, the bird generally arriving within the

ten days, and as often on the late as the early side of the middle of the section.

Golden Eagle.—Has occurred; was, no doubt, formerly a resident.

Whitetailed Eagle.—Once a resident, but now only very occasional. In two instances only have I seen it in this county within the last six years. Its former breeding-station was the Island of Lambay.

Osprey.—Rare.

Peregrine Falcon.—I can scarcely call this falcon a resident. A pair, I am informed, bred at Howth last year, and a pair, some years ago, used to breed at Lambay. In former times Howth, Lambay and Ireland's Eye possessed many eyries of this bird. Stragglers occur occasionally. Five times I could have killed a noble peregrine which frequented Dalkey Island for about a week: the bird being my crest, and I an Irishman, its life of course was sacred.

Merlin.—Resident in the mountainous and boggy parts; soon, like the poor peregrine, will be exterminated by gamekeepers, &c. To be met with pretty often during winter in the snipe bogs. Often has a merlin accompanied me whilst shooting in a snipe bog, and I assure you his depredations are not great; I never saw one strike a snipe on the ground, but if flushed and missed by the shooter, the hawk would give chase, or if shot, before reaching the ground, if the bird could seize it, he invariably carried it off; but if it touched the ground before the merlin caught it, it was quite safe. When the hawk would leave the bog, so might I—all the snipe were flushed. Many an incredulous look has been given me on telling an incident like this, but those who doubt me let them not kill a hawk the moment he is within range, or look deadly at him, for the human eye can terrify most things, and very probably a merlin may sometimes act the pointer for them, and cause wild snipe to lie closer for their dogs. I have heard of many instances of hawks acting as above.

Marsh Harrier.—An occasional autumn and winter visitor. In 1860 I saw one in company with a flock of pomarine skuas; at first I took it for the common skua, but the long tail and white crown of head at once indicated what it was. It was some miles at sea.

Hen Harrier.—Rare. Has been obtained at all seasons.

Shorteared Owl.—A regular, though not a common, winter visitant to the bog, and other suitable localities. Old males are often cream-colour, instead of tawny. Arrives from the beginning of October.

Snowy Owl.—Has occurred.

Great Gray Shrike.—Very rare.

Spotted Flycatcher.—A regular summer visitor. Very local. No dates?

Missel Thrush.—Resident. I am sure it migrates more than partially, from the great addition to its numbers in winter.

Fieldfare.—Only visits my part of the county in very hard weather. Arrives the latest of its family, and leaves in March.

Redwing.—A very abundant winter visitor. Arrives in the beginning of October, and departs late in March. In my note-book I find:—February 15th, 1862. "It is generally imagined that the redwing never sings in Ireland; I shot one in the act to-day." That its song is rare in this county there is very little doubt, as I pay too much attention to my "feathered friends" not to know it if the redwing did often sing. I hope readers will not ask me if I know the redwing from the thrush, as others have been questioned; let it be sufficient for me to say I do.

Ring Ouzel.—A summer visitor to suitable localities. The Hill of Howth is a very favourite spot. No dates?

Robin Redbreast.—Resident. Numbers greatly augmented in spring. That these birds migrate from north to south I feel confident; those in the southern countries crossing to the continent, and their place filled in winter by more northern birds. That a great impulse of nature causes this total and partial migration there can be little doubt. It is not an unfounded supposition of mine either, for the bird is abundant in summer, not near so plentiful in winter, not very numerous (adults) in autumn, and swarming everywhere in spring, as they pass gradually northward; again, it is much scarcer in the northern than the southern counties in winter. That it migrates there is no doubt; so many examples have been taken at sea and far from land. (For additional notes see Zool. 8947).

Redstart.—Rare. Has occurred twice to myself in winter, both females, and twice in summer, both males.

Black Redstart.—To my own knowledge this bird visits favourite localities every second year, in limited numbers. From November to end of January. (See Zool. 8034, 8445, 9433).

Stonechat.—Resident. Numbers augmented in autumn: many winter with us. There is a partial migration in June, from which time till October the bird is scarce. Same remarks as to the redbreast. This is the "furzechat" of Ireland.

Whinchat.—A summer visitant. Local. Arrives about the second week in April; leaves in October.

Wheatear.—A summer visitor from the end of March till the middle of October. Once seen in November. I was inclined to think that the wheatear might winter in some parts of Ireland, but I never found it later than November, even in the west, where it is a most abundant species. Its arrival is the first token of coming spring among the summer migrants, it often appearing at the time the snow bunting visits us on its vernal migration northwards. "Wheatear" is a most absurd name for this bird in Ireland, as it frequents the wildest, most barren and rocky districts it can find. Its Irish name of "stonechat" is very appropriate. The real stonechat never frequents stones at all, but always hedges and furze.

Grasshopper Warbler.—A summer visitor. Local and little known.

Sedge Warbler.—Summer visitor, from the middle of April till the middle of September. Local, but pretty well known.

Blackcap.—Both a summer and winter visitor, in very small numbers. Thompson, in his 'Natural History of Ireland,' mentions the following instances of its occurrence in the County Dublin:—A male shot early in October, 1833. May, 1844, a pair were seen in the under-wood of the Zoological Gardens, Phoenix Park, where, in a previous year, one had been seen. It has also occurred other years in the Phoenix Park. Two shot in December, 1843 (one on the 23rd) at Raheny. October, 1846, at Donnybrook. Last week of January, 1847, at Rathfarnham. It has occurred in various parts of Ireland during the winter. Has only once come under my own observation, and that a female, shot in December, 1860.

Whitethroat.—An abundant summer species from the end of April to the end of September.

Willow Wren.—Common summer visitant, from the first week of April till the end of October.

Chiffchaff.—A summer visitor. Not uncommon, though very secluded. From the beginning of April till ——?

Golden Crested Regulus.—Great additions swell the numbers of this resident in December. For a few weeks they are plentiful in the hedges most winters, but in the pine-copses their tinkling note is always to be heard.

Blue Tit.—Resident. Numbers increase during the autumn and spring.

Cole Tit.—Resident. Great additions in autumn and spring to the fir-woods, which are its chief haunts.

Marsh Tit.—Very rare.

Pied Wagtail.—Resident. More plentiful in winter. There is a great autumnal migration from Ireland. The greatest numbers may be seen in the spring and autumn. Same remarks as redbreast.

White Wagtail.—Is, I am sure, more plentiful than believed. That it is mistaken in many cases for the pied, there can be little doubt, the two species are so closely similar in their winter dress.

Gray Wagtail.—More plentiful in winter than in summer. Often very abundant in spring.

Yellow Wagtail.—Rare; occurred twice to myself in the summer of 1860.

Meadow Pipit.—Resident. Immense flocks in autumn may regularly be seen crossing the channel from the east till as late as December.

Rock Pipit.—Resident. More abundant in winter.

Sky Lark.—Resident. Immense flocks come in winter and autumn from the eastward. The sea-shore at times is covered with their dead bodies: these are called "Scotch" and "Welsh" larks, but their flight must have been more protracted to cause so strong a bird to succumb and die.

Crested Lark.—Once.

Snow Bunting.—Autumnal and vernal migrants. Sometimes, and to favoured localities, a winter resident.

Common Bunting.—Common in summer. I never met it in the winter in this county, though Thompson calls it "permanently resident" in Ireland. "Common" is an untruthful name for it, for the yellow bunting is in all places more common. It is the "meadow bunting," certainly, of Dalkey, for it always builds beneath a high weed in a meadow of standing grass. It occurs here (Dalkey) from the middle of April till the end of October.

Yellow Bunting.—Resident. Great flocks visit this county in hard weather in winter.

Girl Bunting.—Has occurred in some instances; and perhaps not so rare as believed. One shot by myself in 1861.

Blackheaded Bunting.—Common in Ireland, and resident. I know little of it in this county, except seeing it occasionally. In May it is the sparrow of the road-side, and may be seen in numbers at every change of posters along the roads in winter.

Chaffinch.—Resident. Both male and female. In November and December I have seen vast flocks of females on old potato-grounds.

I do not think our residents separate the sexes in winter, as both may be seen all the year round: certainly males may be oftener seen in the spring, but then their loud note and conspicuous perch make them plainly visible. I can give no reason why we see these large flocks of female chaffinches in the autumn and early winter.

Greenfinch.—Resident. More plentiful in summer and autumn than in winter.

Mountain Finch.—A not plentiful or regular winter visitor. This bird breeds in Ireland.

Hawfinch.—Same remarks, but does not breed.

Siskin.—Same remarks. Breeds in suitable localities in Ireland occasionally.

Lesser Redpole.—Resident. Enormous flocks visit favoured localities in winter. Arrival uncertain, departure end of March.

Mealy Redpole.—If the bird I forward you for inspection is the mealy redpole, it breeds sometimes in Ireland, and is not very rare in winter. Being anxious to know the species, I wrote to Mr. Gardner, of Holborn, taxidermist, for a skin of the mealy redpole, a year ago, which on arriving I considered *Fringilla linaria* in winter dress. I returned the bird as *F. linaria*, and not *F. borealis*, and received a reply that Mr. Frederick Bond had authenticated it as *F. borealis*; however, Mr. Gardner did not send the bird again. The specimen now before you is twenty degrees more "mealy" than that sent by Mr. Gardner, and was shot (cruelly if you will) whilst feeding its young, by myself on account of its mealy look. The three young I sent to Mr. T. Cullen, sub-curator of the College, &c., Dublin, to preserve, but I think he failed in doing them, though he has two, I think, in spirits; they were from the nest for some days. The other two and the female I would not kill. I will never consider the mealy redpole as distinct from the common other than as a very old bird, or a northern or permanent variety. A very old male linnet is far more distinct from a middle-aged bird than the two redpoles; in fact, I have seen linnets so intensely crimson on the breast and head, and mealy above, that I even pardoned some for believing them the "greater redpole." [I think the bird a large specimen of the lesser redpole.—*E. N.*]

Twite.—Resident; great additions in hard weather.

Crossbill.—Has occurred in autumn. I never met with it.

Waxwing.—Has occurred.

Starling.—Common in winter. It breeds in very limited numbers.

I do not know of its breeding in the city, though it may do so in a few cases, whereas in favoured England it is a common city bird. Three old elms at Ballybrook induce a few pairs to breed there. Great numbers arrive in November and December, and leave again towards the end of March. In June, 1864, very large flocks passed over this county from the east (see my note, Zool. 9211).

Rosecoloured Pastor.—Has, in a few instances, occurred in the summer months.

Chough.—A common Irish bird and resident, though of late years rather scarce in the County Dublin.

Raven.—I never met with the raven breeding in this county, though every winter I see a few.

Curlew.—Said to have been seen in this county. I have seen solitary birds like rooks flying from the mainland to Howth, a distance of five miles across the water; these were not gray crows, and may have been the real *Corvus corone*. Any so-called Irish examples I have seen were young rooks, that bird retaining the feathers on the bill from April till April—a year. If to be found at all in Ireland is very rare.

Hooded Crow.—Resident. Far more numerous some winters than others.

Jay.—Very occasional.

Great Spotted Woodpecker.—Thompson mentions one shot on the banks of the canal near the city in 1831: another was with it.

Hoopoe.—Very rare.

Cuckoo.—Arrives at the end of April. The young are seen later than the adults, and remain till the middle of October: the old bird is rarely seen after the beginning of July.

Kingfisher.—Resident in small numbers. To be met with in threes or fours along the rocky coast during winter, but not in spring. A pair or two annually wintered at Dalkey, till, in 1864, they were either killed or scared from the shore, for every gun and pistol in the neighbourhood banged and popped at them that winter.

Swallow.—Summer visitor from the end of April till the end of October. May be seen sometimes in November and December.

House Martin.—Summer visitor from the end of April till the middle of October. Seen in November.

Sand Martin.—Summer visitor from first week in April till beginning of October.

Purple Martin.—Once obtained in Ireland, and that at Kingstown.

Swift.—Summer visitor from the first week of May in the country, from the end of April in the city, till towards the end of August. Why the swift always visits the town first I do not know, except the the chimneys warm the air and thus acclimatize the bird for a week or two, as it is very susceptible to cold. Often a fortnight in the city before it comes to Dalkey, a distance of seven miles. Before migrating it hawks till half-past ten, when nearly quite dark: at such times I have caught them in an insect-net.

Whitebellied Swift.—One shot at Rathfarnham on the 14th of March, 1833, now in the Dublin Society's Museum.

Nightjar.—A rare summer visitor to suitable localities.

Turtle Dove.—Same remarks.

Quail.—Resident. Many arrive in spring.

The following non-migrating birds constitute a complete list of the land birds of the County Dublin:—kestrel, sparrowhawk, longeared owl, barn owl, dipper, thrush, blackbird, hedge accentor, great tit, longtailed tit, sparrow, goldfinch, linnet, bullfinch, rook, jackdaw, magpie, creeper, wren, ring dove, rock dove, pheasant, partridge and red grouse. Ninety-eight species of land birds

H. BLAKE-KNOX.

(To be continued.)

Ornithological Notes from Penzance.—I have nothing very interesting to communicate to you on the vernal Ornithology of this district. I never remember so backward a spring, nor do I ever remember the ground so saturated with rain. I saw the first swallow this morning, but they have appeared for some days in the eastern part of the county, so my nephew writes me word. The blackbird commenced his song on the 26th of March, and the chiffchaff on the 30th. Two hoopoes have been captured, one at Scilly. On Friday last I received three specimens of the black tern in summer plumage, killed at a large pond near the Land's End.—*Edward Hearle Rodd; Penzance, April 16, 1866.*

Common Buzzard in Suffolk.—Two individuals of the common buzzard were observed in the vicinity of Worlingham, near Beccles, in February last; one of them was shot on the 22nd: on its dissection it proved to be an immature female. The other bird was not secured.—*T. E. Gunn; Norwich.*

Lanius excubitor, Strix passerina and Bombycilla garrula in Wiltshire.—A fine specimen of *Lanius excubitor* was killed in the immediate neighbourhood of Calne on the 22nd of December last: it was first seen in a thorn-bush close to the canal, and was shot in the act of giving vigorous battle to two wagtails: it is now in the collection of Colonel Ward, of Castle House, Calne. There is also in that gentleman's collection a fair specimen of *Strix passerina*, which was knocked down, about four years since, at

Draycot, in this county, but whose occurrence has, I think, never yet been recorded. Colonel Ward also saw in his garden, in February last, a Bohemian waxwing, which, fortunately for its own safety, timed its arrival on a Sunday, and so escaped the end it would otherwise have undoubtedly met at the hands of a collector of British birds.—*Alfred Charles Smith; Yatesbury Rectory, Calne, April 10, 1866.*

Ixos obscurus in England.—I have received the following note from Mr. G. O. Groom-Napier, of Clifton:—"Five or six years ago a friend of mine, Mr. C. Matthews, purchased at a Hastings poulterer's a stick of small birds; it was in the autumn. One of these birds was an uncommon species, he thought, and brought it to me for identification. I was much puzzled with it at first, but at last made it out from Bree, as *Ixos obscurus*."

I append Temminck's description of the genus *Ixos*:—"Beak shorter than the head, compressed, bent downwards from the base, the point curved and slightly notched, and having stiff bristles at the base of beak. Nostrils basal, lateral, ovoid, half closed by a naked membrane. Feet short and weak, with the tarsus shorter than the middle toe; the outside toes connected at the base; the claws short and slender. Wings short."

"This section is a new one in the Ornithology of Europe, several representatives of it exist in Africa and in the Islands of the Indian Archipelago, where the species of this genus are very numerous. Mr. Müller, a naturalist travelling in India, has informed me that in Java the species are sedentary in their habits; some species inhabit mountainous districts, and one is found at an elevation of 8000 feet; others live in the plains, even in the neighbourhood of inhabited districts; their note somewhat resembles that of our chaffinch. They generally appear in pairs or in small flocks, but seldom in great numbers; they mostly frequent trees or shrubs bearing fruit or berries, which form almost their only food: they are often seen on the ground, looking after fallen berries, but they rarely pick up caterpillars or other insects; indeed they may almost be considered as entirely fructivorous."

Description of the species:—

IXOS OBSCURUS, Temminck.

"Crown of the head, cheeks and throat dull brown; back of the neck, wing-coverts, back and rump dingy earth-brown; whole of the wing the same brown, but rather brighter; breast and flanks clear brown; middle of belly whitish brown; belly and vent dull white; tail uniform blackish brown; beak and feet black. Length eight inches: the sexes are alike."

"This new species rather resembles, in form and general appearance, the *Ixos plebeius* of Northern Africa, figured in the *Atlas of Travels in Egypt* by Rüppel; but the colours of the plumage differ sufficiently in these two species to prevent them being mistaken. Our species, although different in colour of plumage closely resembles the one figured in the coloured plates under the name of *Ixos Vaillantii*, or *Merle cul-jaune du lap* (Buffon, pl. enl. 317), which is the Brunoir of Le Vaillant (*Ois. d'Afr.* pl. 106, f. 1). It resembles also, in all its characters several other species of the same genus."

"Habitat. Found in Andalusia in tolerable numbers. Seen also probably in North Africa."

"Food and propagation unknown."—*Edward Newman.*

Redwinged Starling at Brighton.—A very handsome redwinged starling (*Agelaius phoeniceus*) was caught at Hove, on Wednesday, March 21, and brought alive to Mr. G. Swaysland, the eminent bird-preserved, of Queen's Road, Brighton, and by him transferred to his aviary, where I have twice had the pleasure of seeing the interesting captive. This rare bird is an adult male, in fine plumage and condition, with the beautiful red and orange colouring of the wing strongly defined. He pined and moped so much during the first two days after his capture that it was feared he would die: being treated, however, with great care and attention he revived, and has since become more reconciled to his new abode, and now cracks the canary-seed with great gusto. It is noticed by Swaysland that the bird makes a noise or "cheep" similar to that of the young of the ringed plover, that he scratches with his feet like a fowl, and is very partial to a bath, in which he frequently indulges. I saw him to-day soon after concluding his ablutions, and had ample opportunity of seeing him to advantage: when smoothing his feathers he is certainly well worth a visit.—*T. J. Monk; Mountfield House, Lewes, March 27, 1866.*

Serin Finch near Brighton.—A beautiful example of the Serin finch (*Fringilla serinus*) was caught to-day in the parish of Hove, near Brighton. It was taken in a clap-net by a man catching linnets and goldfinches, and brought by him to Mr. G. Swaysland, Queen's Road, Brighton, who purchased the bird, and kindly sent me a message respecting this rare visitor, and at whose house I had the pleasure of seeing the same alive, and within a few hours of its capture. It is in fine summer plumage, and a perfect specimen; and answers in all respects, save size, to the description and drawing of this pretty finch in Bree's 'Birds of Europe.' The bird now belongs to me, and I need scarcely add will prove an ornament to my collection.—*Id.; April 19, 1866.*

Little Ringed Plover near Lewes.—On Saturday, March 17th, when in the brook-lands between Lewes and Newhaven, I came upon a wing of nearly twenty of the little ringed plover, and succeeded in shooting three specimens, which are now with Mr Swaysland, of Brighton, for preservation.—*Id.*

Purple Waterhen near Southampton.—I had the extreme pleasure, on Thursday last, of inspecting a magnificent specimen of that lovely bird, the purple waterhen or violet gallinule (*Porphyrio hyacinthinus*), which had been shot during the month of February, 1864, in the parish of Redbridge, near Southampton. The bird is still in the hands of its captor, James Ridges, of Redbridge, who will be delighted to show it to any of your readers. It has been set up in a very life-like manner by that excellent taxidermist, Mr. C. Hendy, of Southampton, than whom no man is more competent. The characteristic tameness of the purple waterhen was well exemplified in this specimen: it was feeding in a bed of cabbage near the Southampton Water, and the gun with which Ridges killed it missed fire several times before it discharged, and yet the bird took little notice of it, although not more than fifteen paces distant. I believe the above will be interesting, as the first recorded instance of the capture of this handsome bird in Great Britain.—*Henry Reeks; Manor House, Thruxton, April 16, 1866.*

Forktailed Petrel at Elmore.—An individual of this rare petrel was taken, in an exhausted condition, last week, at Elmore, near Gloucester.—*W. V. Guise; Elmore Court; April 18, 1866.*

Greenland Shark (Squalus borealis) on the Dogger Bank.—Two of these predacious fish were lately exhibited by some fishermen in a neighbouring sea-port, under the name of "sea elephants." I was informed they were captured in February on that well-known fishing-ground, the famous Dogger Bank. On opening them a large quantity of cod and ling, &c., were found in their stomachs. I expected to have seen the actual carcasses of these monsters, and was disappointed in finding only the stuffed skins. The true form of the fish had, however, been very well preserved, although the artist had given them a most extraordinary pair of unshark-like eyes. On reference to Couch's 'British Fishes,' I was enabled to identify these fish as the Greenland shark; and as Mr. Couch states that only three or four instances have been known of their appearing so far south of the icy sea as the British coasts, probably some short notice of them may be found interesting. The northern extremity of the Dogger Bank is in latitude $57^{\circ} 24'$, consequently they must have wandered far south of their usual cruising-ground within the arctic circle. I did not measure these fish, but judge they were not less than 12 to 14 feet in length, with a girth in the widest part of upwards of six feet, gradually tapering to the tail. Fins and tail small for the size of the fish; gill-openings small and five in number; skin very rough; the mouth larger, with the internal lining set with a perfect arsenal of offensive weapons. I counted eight rows of teeth; Mr. Couch says nine, and it is quite possible I may have overlooked a row. The position and character of these teeth exactly answer the description given in the first volume of 'Fishes of the British Isles,' page 59, and the plate, page 66. The "Old Bushman," in 'Ten Years in Sweden,' says this species "has been occasionally taken on the south coast of Sweden," and that "it is the only shark which is known to come on the coasts of Finland east of the North Cape."—*John Cordeaux; April 11, 1866.*

Description of the Larva of Scoria dealbata.—My notes on the earlier stages of this species are not so satisfactory as I could wish, for they were jotted down in a busy time; but, as far as they go, I believe them to be correct. On 2nd July, 1864, I received indirectly from Mr. Wilks (late of Ashford), some eggs which began to hatch on the 7th. I scarcely know any larva which varies so little in tint throughout its growth: of course as the bulk increases more lines and mottlings appear, but they are all of the same ochreous and gray tint throughout. Mr. Stainton, in the 'Annual' for 1862, has described the larva just before hybernation, when he says it was $\frac{7}{12}$ ths of an inch in length; but the three which I succeeded in retaining (some dozen others escaped, from my not being able to attend to them in time) grew to a full inch in length before they ceased feeding; all through the winter I noticed that, except in the coldest weather, they remained extended on the leno covering of their flower-pot, as though very fond of fresh air. On the 14th of February they began eating again, and grew slowly till the middle of April, when they changed skin for the last time. About the middle of May they seemed to have attained their full size, and began spinning about the 20th. When full grown this larva is a longish, stout-looking smooth looper, tapering considerably from the hinder segments towards the head; the length $1\frac{1}{2}$ inch; the head flat and rounded at the sides; the anal flap large. The general colour ochreous or brownish gray; but ornamented with so many waved

and irregular lines that it is hard to describe. The head is pale ochreous; down the centre of the back is a double fine dusky line, which, with the first subdorsal line (composed of a double fine thread also), forms a series of irregular figures by alternately contracting and expanding; on the anterior and posterior segments the dorsal line becomes closer and darker. Below the first subdorsal line is a stripe of yellowish or reddish buff; then comes another waved fine double thread; then the yellowish spiracles, scarcely distinguishable in a drab stripe, which is bordered below with a dusky line, followed by a reddish buff line; the belly drab with central and sub-ventral whitish lines. The usual spots are represented by fine black dots, and the central segments in one specimen were suffused with a smoky hue. About the 20th of May these larvæ began to spin, and soon formed for themselves beautiful spindle-shaped cocoons of yellow silk, attached to upright blades of grass. And here, unfortunately, I can say no more: after waiting some time for the perfect insects I examined the cocoons closely, and found that by some mischance the pupæ had been killed. But although I failed, I think the species might be easily reared if kept in the open air, and fed on growing plants of dock, chickweed, knotgrass and the coarse grass which, in its localities, is doubtless the favourite food of this species.—*Rev. John Hellins, in the 'Entomologist's Monthly Magazine' for January, 1866.*

PROCEEDINGS OF SOCIETIES.

ENTOMOLOGICAL SOCIETY.

April 2, 1866.—Sir JOHN LUBBOCK, Bart., President, in the chair.

Donations to the Library.

The following donations were announced, and thanks voted to the donors:—*'Exotic Butterflies,'* by W. C. Hewitson, part 58; presented by W. W. Saunders, Esq. *'Monographie des Platypides,'* par F. Chapuis; by the Author. *'Proceedings of the Royal Society,'* Vol. xv. No. 81; by the Society. *'The Zoologist'* for April; by the Editor. *'The Entomologist's Monthly Magazine'* for April; by the Editors.

Election of Member.

John Watson, Esq., of Rose Hill, Bowdon, Cheshire, was balloted for and elected a Member.

Exhibitions.

Mr. William Rogers sent for exhibition specimens of the ichneumon *Pimpla oculatoria*, which he had bred from the egg-bag of a spider found under the loose bark of an oak-fence.

Mr. F. Smith and Mr. Desvignes both said that they had bred the species, but always from bramble-sticks.

Mr. W. W. Saunders exhibited three interesting objects from New South Wales. First, a number of (empty) eggs, probably of a *Chrysopa*, disposed in a line or chain on, or rather over, the bark of a tree; they were elongate in shape, about twice as long as broad, formed a continuous and connected chain, and each was supported by a

hair-like pedicel about a quarter of an inch above the level of the bark; but the peculiarity of the arrangement was that the first, third, fifth, and so on, were disposed with their longer axes all in the same direction, and rested on pedicels which were perpendicular to the plane of the bark, whilst the alternate eggs were transversely placed, with their shorter axes in the same line with the longer axes of the odd numbers, and were supported by longer pedicels which were inclined at about half a right angle to the plane of the bark: the object of such an arrangement was difficult to imagine, whilst it must necessarily render the process of egg-laying a very complex operation. Secondly, a larva, probably of a Lamellicorn beetle, with two fungoid excrescences, *Sphæriæ*, springing from the back of the head, one on each side, like ram's horns. [See Proc. Ent. Soc. 1834, p. xviii.; 1836, pp. vi., xxiii.; 1838, p. iv.; 1839, p. xxxiv.; 1841, p. xxii.; 1842, p. lxvii.; 1852, p. xxi.; 1854, p. xvi.; 1837, p. xvii.; 1863, p. clxxii.; 1864, p. xlv.; 1865, p. lxxxix.; for other instances of fungoid growths on insects]. And thirdly, four Locustideous larvæ, about half an inch long, attached to a small branch of a tree; one of them was tightly held head downwards by the other three, which were themselves so locked in a close embrace and had their legs so intricately entangled, that it seemed they had been unable to release themselves, and thus had died.

Mr. F. Smith said that, in Stephens' 'Catalogue of British Insects,' the genus *Bembex* was included on the authority of Donovan, who had figured *B. octopunctata* as British, but without assigning any precise locality. In the 'Entomologist's Annual' for 1866, p. 122, he (Mr. Smith) had expressed a hope that this, amongst other genera now expunged from our list, might be re-discovered: he had the pleasure of exhibiting a specimen of *Bembex olivacea* (which name was a synonym of, but had priority over, *B. octopunctata*) placed in his hands by a gentleman at Bristol, to whom it was given many years ago by a Dr. Hicks, who said that he had himself captured the insect near Gloucester.

Mr. J. J. Weir exhibited some larvæ which he believed to be only the common meal-worm (*Tenebrio*), but which were found in a wine-cellar, and had done considerable damage by eating through the corks of port wine, so that the wine escaped: sealing-wax on the head of the cork did not operate as a preventive. Oddly enough, though they had attacked the corks of sherry also, they had not completely perforated them, but stopped short of the wine. It was suggested as a probable cause for the incursion into the cellar that perhaps bran had been used in packing the wine, in lieu of saw-dust.

Mr. W. W. Saunders said that numerous instances of injury done to corks by various insects had been brought before the Society. [See Proc. Ent. Soc. 1835, p. lv.; 1837, p. lx.; 1848, pp. xxxv., xli.; 1849, p. lxi.; 1851, p. cxiv.; 1852, pp. viii., xvii., xxiii.] He remembered a case in which a number of larvæ of *Dermestes lardarius*, which had been brought into the docks with a cargo of skins, made an incursion into a neighbouring warehouse in which were stored some manufactured corks; these they perforated and rendered useless: large damages were claimed against the Dock Company, and a law-suit seemed imminent, but the matter was finally compromised.—J. W. D.

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